

General Diets

Vegetarian Diets

General Description

In the past several years there has been an increase in the number of people who avoid some or all animal products in their diets. There are three common types of vegetarian diets:

- Vegan or Total Vegetarian only foods of plant origin are included in this diet plan.
- Lacto-Vegetarian includes all plant products and dairy products but no meat or eggs.
- Lacto-Ovo Vegetarian includes all plant products, dairy products and eggs.

There are other types of vegetarian diets which use additional restrictions such as the Macrobiotic diet. The Macrobiotic diet is not provided by the Clinical Center Nutrition Department because of extreme difficulty in achieving nutritional adequacy.

Indications for Use

These diets are usually ordered based on patient preference. These diets may be contraindicated if nutrient modification is needed or a specific protocol need is identified.

Nutritional Adequacy

In comparison to the Recommended Dietary Allowances, lacto and lacto-ovo vegetarian diets are nutritionally adequate with same exceptions as for the regular diet.

You can get enough protein from a total vegetarian diet as long as the variety and amounts of food consumed are adequate¹. A potential deficiency of the total vegetarian diet is calcium especially for females at all ages, teenagers and young adult males. A viable option for ensuring adequate calcium intake is a calcium-fortified milk alternate available in supermarkets². Other nutrients of concern in the total vegetarian diet are B12, riboflavin, iron, vitamin A, vitamin D, high quality protein and total caloric intake. It is difficult for the total vegetarian diet to provide the energy needs for children due to the volume of food required.

Ideally all vegetarians should be seen by a registered dietitian to assess the adequacy of the diet and determine the need for further vitamin and/or mineral supplementation needs.

References

- 1. U.S. Department of Agriculture, Agricultural Research Service, Dietary Guidelines Advisory Committee, 1995. Report of the dietary guidelines advisory committee on the dietary guidelines for Americans, 1995, to the Secretary of Health and Human Services and the Secretary of Agriculture, 58pp.
- 2. Haddad EH. Development of a Vegetarian Food Guide. American Jour of Clinical Nutr, 59(5): 1248S-1254S, May 1994.
- 3. Position of the American Dietetic Association: Vegetarian Digets. Jour of the Am Diet Assoc, 93(11), Nov 1993.

Vegetarian Diets

Food Groups and Serving Sizes for Vegetarian Diets

	Daily	
Food Group	Servings	Serving Sizes
Breads, Grains, Cereals (50% whole grain)	6-11	1 slice bread, 1 oz. ready to eat cereal 1/2 cup cooked cereal, rice or pasta 6-in tortilla, 1 small roll or muffin 1/2 bagel or English muffin
Legumes	1-2	1/2 cup cooked dry beans, lentils, peas, limas, etc., 1/2 cup tofu, soy products, or meat analogs
Vegetables (dark-green and green leafy vegetables)	3-5	1/2 cup cooked vegetables1 cup raw leafy vegetable or salad3/4 cup vegetable juice
Fruits	2-4	1 medium piece of fruit, 1/2 cup chopped, cooked, or canned fruit, 1/4 cup dried fruit 3/4 cup fruit juice
Nuts and Seeds	1-2	1 oz. almonds, walnuts, seeds, etc. 2 tbsp. peanut butter, almond butter, tahini
Milk, Yogurt and/or Cheese	2-3	1 cup lowfat milk or yogurt 1.5 oz. lowfat cheese 1/2 cup part skim ricotta
Milk Alternatives (soy milk) and tofu	see patterns	1 cup soy milk fortified with calcium/vit D and vit B12, 1 cup tofu
Fats and Oils	see patterns	1 tsp. oil, margarine, or mayonnaise 2 tsp. salad dressing, 1/8 avocado, 5 olives
Sugar	see patterns	1 tsp. sugar, jam, jelly, honey, syrup, etc.

Vegetarian Diets

Suggested Meal Patterns for Lacto-ovo Vegetarian Diets

Food Group	Daily Servings		
	1600 Kcal/Day	2200 Kcal/Day	2800 Kcal/Day
Bread, Grains, Cereals	6	9	11
Legumes, Plant Proteins	1	2	3
Vegetables	3	4	5
Fruits	2	3	4
Nuts, Seeds	1	1	1
Milk, Yogurt, Cheese	2-3	2-3	2-3
Eggs	1-2	1-2	1-2
Added Fats and Oils	2	4	6
Added Sugar	3	6	9

Suggested Meal Patterns for Vegan Diets

Food Group	Daily Servings		
	1600 Kcal/Day	2200 Kcal/Day	2800 Kcal/Day
Breads, Grains, Cereals	8	10	12
Legumes, Plant Proteins	1	2	3
Vegetables	2	3	4
Dark Green Leafy Vegetables	2	2	2
Fruits	2	4	6
Nuts, Seeds	1	1	1
Fortified Soy Drinks and Tofu	2-3	2-3	2-3
Added Fats and Oils	2	4	6
Added Sugar	3	6	9

Vegetarian Diets

Suggested Meal Patterns for Children at Three Different Energy Levels

Food Group	Daily Servings		
	1300 Kcal/Day	1800 Kcal/Day	2000 Kcal/Day
Bread, Grains, Cereals	3-4	4-5	5-6
Legumes, Plant Proteins	1/2 serv	1	1
Vegetables	1-2	2-3	2-3
Fruits	2-3	2-3	2-3
Nut Butters	1/4 serv	1/2 serv	1
Milk, Yogurt, Cheese, or Fortified Soy Milk	2-3	2-3	3-4
Added Margarine or Oils	2	3-4	4
Added Sugar	3	3-6	6